

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007582**Date Inspected:** 13-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Wei Song**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector, George Goulet, proceeded to the Bay 11 in response to a ZPMC notification of witness inspection #'s 3410 and 3412 for MT inspection of the following:

This QA Inspector, George Goulet, performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The members were identified as lift 2 west tower skin B and skin C fit lugs, lift 2 west tower gusset plates on skin B and skin C, west tower lift 2 skin B to diaphragm, west tower lift 2 skin C to diaphragm. The weld designations reviewed were from diaphragm 53M to the bottom side of diaphragm 65M.

Caltrans OSM Quality Assurance (QA) Inspector Shrikant Uteker was present and performed MT inspection on the top side of diaphragm 65M and locations above in west tower shaft, lift 2.

ABF Representative Luo Lai Quan (ABF1) was present during the inspection and assisted in identifying which welds needed to be MT inspected.

Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

SAW welding of weld joints NSD1-FDSA4-1A/C-16, 4B, 18, 5B located on PCMK north tower, lift 4, skin D.

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Welder was identified as 040460. ZPMC QC was identified as CWI Shi Wei Song (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Lu Wei Chao, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2221-B-U3B-S-2 for the CJP welds and WPS-B-T-2321-B-P3-S-2 for the PJP welds. Also at this location and appearing to be monitoring the welding was ABF Representative Xiao Jun Peng.

SAW welding of weld joints NSD1-FCSA4-1A/C- 68A, 84, 63A located on PCMK north tower, lift 4, skin C. Welder was identified as 209051. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Lu Wei Chao, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2221-B-U3B-S-2 for the CJP welds and WPS-B-T-2321-B-P3-S-2 for the PJP weld. Also at this location and appearing to be monitoring the welding was ABF Representative Jiang Zi Wen.

SAW welding of weld joints NSD1-FCSA4-1A/C- 80, 27A, 76, 56A located on PCMK north tower, lift 4, skin C. Welder was identified as 220081. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Lu Wei Chao, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2221-B-U3B-S-2 for the CJP welds and WPS-B-T-2321-B-P3-S-2 for the PJP welds. Also at this location and appearing to be monitoring the welding was ABF Representative Jiang Zi Wen.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above, and this QA Inspector, George Goulet, asked each welding QC if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each welding QC showed this QA Inspector, George Goulet, that each welding QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all each welding QC observed did appear to comply.

ABF1 informed this QA Inspector, George Goulet, and QA Inspector Shrikant Uteker that ABF1 would not present a list of the welds MT inspected by this QA Inspector, George Goulet, and QA Inspector Shrikant Uteker to be initialed to signify Caltrans completion of inspection.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

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| Inspected By: | Goulet, George | Quality Assurance Inspector |
| Reviewed By: | Carreon, Albert | QA Reviewer |
